

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A peripheral surface shape measuring apparatus of a roll-like object which measures a peripheral surface shape of a roll-like object, comprising:

B a displacement amount measuring device which has a pinching device including two arms connected together at first end portions with a hinge and that pinch the roll-like object in a diameter direction of the roll-like object with a sensor part and a reference point part arranged opposite to each other in second end portions of the two arms, and which measures a displacement amount when the sensor part is relatively displaced in the diameter direction with respect to the reference point part; and

a moving device which moves the displacement amount measuring device from one end side of the roll-like object to another end side of the roll-like object in an axial direction of the roll-like object;

a casing which supports the displacement amount measuring device and the moving device; and

a pair of jacking devices which are arranged on the casing, each of the pair of jacking devices having a forked supporting part to be engaged on one of sides of a core of the roll-like object,

wherein when the peripheral surface shape of the roll-like object is measured, the casing is detachably mounted on the roll-like object, and the pair of jacking devices adjust so that inclination of the casing with respect to the core of the roll-like object is eliminated so as to enable the displacement amount measuring device to move in parallel to a central axis of the roll-like object, and

B' wherein the peripheral surface shape of the roll-like object is measured on the basis of the displacement amount of the sensor part accompanied by movement of the displacement amount measuring device.

2. (canceled)

3. (currently amended) The peripheral surface shape measuring apparatus of the roll-like object according to claim 1, wherein the sensor part and the reference point part are shaped like bars which are perpendicular to ~~an~~ the axial direction of the roll-like object and are in parallel to each other.

4. (canceled)

5. (original) The peripheral surface shape measuring apparatus of the roll-like object according to claim 1, wherein contact positions to the roll peripheral surface of the sensor part

and the reference point part which pinch the roll-like object are within a range of ± 5 mm with respect to the diameter direction in a plane perpendicular to the diameter direction.

6. (canceled)

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7. (currently amended) The peripheral surface shape measuring apparatus of the roll-like object according to claim 5, wherein the sensor part and the reference point part are shaped like bars which are perpendicular to ~~an~~ the axial direction of the roll-like object and are in parallel to each other.

8. (canceled)

9. (canceled)

10. (new) A peripheral surface shape measuring apparatus of a roll-like object which measures a peripheral surface shape of a roll-like object, comprising:

a displacement amount measuring device which has a pinching device including two arms connected together at first end portions with a hinge and that pinch the roll-like object in a diameter direction of the roll-like object with a sensor part and a reference point part arranged opposite to each other in second end portions of the two arms, and which measures a

displacement amount when the sensor part is relatively displaced in the diameter direction with respect to the reference point part;

a plate having a length from one end side of the roll-like object to another end side of the roll-like object in an axial direction of the roll-like object;

a pair of parallel bars which are arranged along the axial direction of the roll-like object on a surface of the plate facing to the roll-like object;

a rail which is arranged along the axial direction of the roll-like object on another surface of the plate; and

a moving device which supports the displacement amount measuring device and moves on the rail,

wherein when the peripheral surface shape of the roll-like object is measured, the pair of parallel bars are in contact with a peripheral surface of the roll-like object so that the plate is detachably mounted over the peripheral surface of the roll-like object through the pair of parallel bars in a state where the rail is parallel to a central axis of the roll-like object, and the moving device moves on the rail along with the displacement amount measuring device from the end side of the roll-like object to the other end side of the roll-like object in parallel to the central axis of the roll-like object,

wherein the peripheral surface shape of the roll-like object is measured on the basis of the displacement amount of the sensor part accompanied by movement of the displacement amount measuring device.

11. (new) The peripheral surface shape measuring apparatus of the roll-like object according to claim 10, wherein the sensor part and the reference point part are shaped like bars which are perpendicular to the axial direction of the roll-like object and are in parallel to each other.

12. (new) The peripheral surface shape measuring apparatus of the roll-like object according to claim 10, wherein contact positions to the roll peripheral surface of the sensor part and the reference point part which pinch the roll-like object are within a range of ± 5 mm with respect to the diameter direction in a plane perpendicular to the diameter direction.

13. (new) The peripheral surface shape measuring apparatus of the roll-like object according to claim 12, wherein the sensor part and the reference point part are shaped like bars which are perpendicular to the axial direction of the roll-like object and are in parallel to each other.
